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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JAGANNATHAN, MELANIE

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/539,408

Applicant(s)

TWEEDLY ET AL.

Examiner

Melanie Jagannathan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-13 and 15-22 is/are rejected.
- 7) ☐ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 8-13, 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Le et al. US 6,711,164.

Regarding claims 1-4, 8-13, 17-22, the claimed method of carrying packetized voice data over data network comprising aggregating multiple datagrams bound for a common intermediate switching point into a tunnel packet payload, each datagram comprising a voice data payload from a selected voice data stream and a compressed header-formatted from which when combined with information from one or more previous datagram headers from same voice data

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stream, the datagram's destination endpoint can be derived and encapsulating into tunnel packet and forwarded is disclosed by host transmitting IP flow where each packet header has to be compressed by way of compressor (element 314). Compressor removes IP-ID from each of headers of each of the packets that form transmission unit and then compresses header of packets according to context for the particular flow and forwarded to intended destination. See column 4, lines 16-56. The claimed deaggregating the tunnel packet payload at intermediate switching point and assigning the datagrams to new tunnel packet payloads based on a destination endpoint derived from each datagram's header and one or more previous datagram headers from same voice data stream is disclosed by decompressor decompresses the header of each packet of each flow according to respective context that has been stored and supplied to IP-ID regenerator. See column 4, lines 57-67, column 5, lines 1-7, lines 24-40, column 6, and lines 22-29.

Regarding claims 5-6, the claimed occasionally resetting the switching context by sending a datagram for that switching context with an uncompressed header is disclosed by compressor compressing packets according to context but initially when uncompressed packets arrive at compressor, information corresponding to the full header packet is stored as the context. See column 4, lines 41-56.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Le et al. in view of Westberg US 6,041,054.

Le et al. discloses all of the limitations of the claims except for tunnel packet encapsulated in one or more ATM cells for transport. Westberg discloses compression of packets with use of AAL2 minicell header. See Figure 9, and columns 5-8. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Le et al. with ATM cells. One of ordinary skill in the art would be motivated to do this for bandwidth efficiency. See column 1, lines 8-42, column 3, lines 5-15.

6. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le et al.

Regarding claim 15, Le et al. disclose all of the limitations except for timer in communication with multiplexer, the multiplexer using timer to dispatch an outbound tunnel packet payload when the first tunneled datagram to be assigned to a payload has been delayed by a maximum desired delay. Le et al. discloses optimizations of header compression method where maximum lifetime of packet is less than time at counter of source host. See column 6, lines 36-48. At the time the invention was made it would have been obvious to a person of

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ordinary skill in the art would be motivated to modify Le et al. with timer for dispatching outbound tunnel packet payload. One of ordinary skill in the art would be motivated to do so for efficient timing of delivery of packets.

Regarding claim 16, Le et al. disclose all of the limitations of the claim except for multiplexer dispatching outbound tunnel packet payload when a desired payload size has been reached. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Le et al. to dispatch outbound tunnel packet payload when a desired payload size has been reached. One of ordinary skill in the art would be motivated to do this for robust forwarding of packets.

#### ***Allowable Subject Matter***

7. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art of record does not disclose, in single or in combination, the claimed forwarding engine having capability to reroute tunneled datagrams associated with a given switching context by changing a field in the switching context from one outbound multiplex identifier to another.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Le US 6,680,955 discloses technique for compressing a header field in a data packet.

Hamiti et al. US 6,751,209 disclose header compression in real time service.

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Mahler et al. US 6,542,504 profile based method for packet header compression in a point-to-point link.

Jonsson et al. US 6,754,231 disclose robust header compression in packet communications.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 703-305-8078. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melanie Jagannathan  
Patent Examiner  
AU 2666

MJ

  
**FRANK DUONG**  
**PRIMARY EXAMINER**